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E-MANUAL



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Model _____ Serial No. _____

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□ Using the Channel Menu

Press the **CONTENT** button to select **Watch TV**, and then select the desired menu item. Choose from **Schedule Manager**, **Channel List**, and **Channel Manager**.



- The displayed image may differ depending on the model.

■ Schedule Manager

⌚ **CONTENT** → **Watch TV** → **Schedule Manager** → **ENTER** ↵

To cancel or set **Timer Viewing**. **Timer Viewing** lets you display the channel you want at the time of your choice.

Using the Timer Viewing

You can set the TV to display a desired channel automatically on a day and at a time of your choice.

⌚ You must set the current time first using the **Time** → **Clock** function in the **System** menu to use this function.



To use Timer Viewing, follow these steps:

1. Press the **ENTER**  button to select **Schedule Manager**.
2. Press the **ENTER**  button to add manual booking.
3. Press the  /  /  /  buttons to set **Channel**, **Repeat**, **Date**, and **Start Time**.



- **Channel:** Select the desired channel.
- **Repeat:** Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday**. If you select **Manual**, you can set the day you want.
 - ☞ The ✓ mark indicates a day you selected.
- **Date:** you can set a desired date.
 - ☞ **Date** is available only when you select **Once** in **Repeat**.



- **Start Time:** You can set the start time you want.
- ☒ You can only schedule memorized (added) channels.
- ☒ On the Information screen, you can change or cancel a scheduled viewing.
- **Cancel Schedules:** Cancel a scheduled viewing.
- **Edit:** Change a scheduled viewing.
- **Return:** Return to the previous screen.



■ Channel List

The **Channel List** contains the channels your TV displays (**Added Channels**) when you press the Channel button on your remote. On the **Channel List**, you can view **Added Channels**, channel information, **Favorites**, and manage channels.

- When you press the **CH LIST** button on the remote control, the **Channel List** screen is displayed at once.



- The displayed image may differ depending on the model.

- **Added Channels:** Shows all added (memorized) channels.
- **Favorites 1-5:** Shows all favorite channels, arranged in up to five groups. Each group has a separate screen.
 - ☞ The TV displays **Favorites** only if you have added favorites using **Add to Favorites**.



 If you want to view the list of favorite channels, press the **CH LIST** button, and then press the  (**CH Mode**) button to display **Favorites 1-5**. If you have favorites in more than one Favorite Group, press the  (**CH Mode**) to view the other groups. Press the  button to return to the **Added Channels**.

 Using the colored and function buttons with the **Channel List**.

-  **A** Red (**Antenna**): Switches the mode and display between **Air** or **Cable**.
-  /  (**CH Mode**): Toggles between the **Favorites** list (if you have added favorites using **Add to Favorites**) and the **Added Channels**.
-  (**Watch**): Press to watch the channel you selected.
-  (**Page**): Scrolls the **Channel List** to the next or previous page.



Channel Status Display Icons

Icon	Description
A	An analog channel
	A locked channel



■ Channel Manager

(CONTENT → Watch TV → Channel Manager → ENTER)

Using **Channel Manager**, you can add, edit, or delete Added and Favorite channels. You can also add and edit channel names.



- The displayed image may differ depending on the model.

- () **Added Ch.**: Shows all added channels.
- () **All Channels**: Shows all currently available channels. Includes channels that have not been added.
- () **Favorites 1-5**: Shows favorite channels, arranged in up to five groups. Each group has a separate screen.

☞ Using the colored buttons with **Channel Manager**.

- **A** Red (**Antenna**): Switches between **Air** and **Cable**.
- **D** Blue (**Sorting**): Sorts the channel list by channel number or by name.



Using the Arrow buttons with **Channel Manager**

1. Highlight a channel in the first column on the left, and then press the  button. The **Channel Manager** sub-menu appears.
2. Use the  or  buttons to select **Added Ch.**, **All Channels** or **Favorites 1** through **5**, and then press **ENTER**  or the  button. The cursor enters the screen you selected.
 If you have no favorites in a **Favorites** Group, the cursor will not enter that screen.

Channel Status Display Icons

Icon	Description
	An analog channel
	A selected channel
	A favorite channel
	A locked channel

Channel Manager Option Menu

Manage channels using the **Channel Manager** menu options (**Watch**, **Add to Favorites / Edit Favorites**, **Lock / Unlock**, **Channel Name Edit**, **Add / Delete**, **Deselect All**, **Select All**). The Option menu items that appear may differ depending on the channel status and type.

1. Use the arrow buttons to select a channel, and then press the **ENTER**  button.
A check appears next to the channel.
 - ⌚ You can select more than one channel by highlighting each channel with the cursor, and then pressing **ENTER** .
 - ⌚ Pressing **ENTER**  again deselects the channel.
2. Press the **TOOLS** button on your remote.
3. Select an option, and then press **ENTER**  to activate the option or change its settings.

Options

- **Watch:** Watch the channel you selected. To use, select **Watch** on the Option menu, and then press **ENTER** .
- **Add to Favorites / Edit Favorites:** **Add to Favorites** appears if the channel you selected is not already a favorite. **Edit Favorites** appears if the channel you selected is already a favorite.

Using Add to Favorites to add a channel to the Favorites List:

- 
- 
1. Select **Add to Favorites**, and then press the **ENTER**  button. The **Add to Favorites** screen appears.
 2. The **Add to Favorites** screen has five groups, **Favorites 1**, **Favorites 2**, etc. You can add a favorite channel to any one of the groups. Select a group using the up and down arrows on your remote, and then press **ENTER** .
 3. Select **OK**, press **ENTER** , and then press **ENTER**  again.

Using Edit Favorites to delete a channel from the Favorites List:

1. Select **Edit Favorites**, and then press the **ENTER** button. The **Edit Favorites** screen appears.
2. The **Favorites** Group you assigned the channel to is checked. Select the group, and then press **ENTER**. The check disappears.
3. Select **OK**, press **ENTER**, and then press **ENTER** again.



Using Edit Favorites to move a channel from one Favorites Group to another:

1. Select **Edit Favorites**, and then press the **ENTER** button. The **Edit Favorites** screen appears.
2. The **Favorites** Group you assigned the channel to is checked. Select the group, and then press **ENTER**. The check disappears.
3. Use the Up or Down arrow key to highlight a different group, and then press **ENTER**. A check appears by the group's name.
4. Select **OK**, press **ENTER**, and then press **ENTER** again.



- **Lock / Unlock** : Lock a channel so that the channel cannot be selected and viewed.
 - ☞ This function is available only when the **Child Lock** is set to **On**.
 - ☞ The PIN input screen appears. Enter your 4-digit PIN, the default of which is “0-0-0”. Change the PIN using the **Change PIN** option.
- **Channel Name Edit**: Assign a name of up to five characters to a channel. For example, Hist, Food, Golf, etc. This makes it easier to find and select the channel.
- **Add / Delete**: Add a channel to or delete a channel from the **Channel Manager**.
When you use the Channel button on your remote to change channels, your TV only displays the channels on the **Channel Manager**.

Deleting a Channel from the Channel Manager:

1. Select **Delete**, and then press the **ENTER** button. The Delete pop-up appears.
2. Select **OK** on the pop-up, press **ENTER**, and then press **ENTER** again.

Adding a Channel to the Channel Manager:

1. Select a deleted channel on the **All Channels** list, and then press the **ENTER** button.
 Deleted channels are grayed out.
2. Press the **TOOLS** button on your remote. The Options menu appears.
3. Select **Add**, press **ENTER**, and then press **ENTER** again.



 NOTE

- Your TV will display all channels, including channels you deleted from the **Channel Manager**, on the **All Channels** list.
- A gray-colored channel on the **All Channels** list indicates the channel has been deleted from the **Channel Manager**.
- **Add** only appears if you have selected a deleted channel on the **All Channels** list.
- **Delete** only appears if you have selected an added channel on the **Added Ch.** or **All Channels** list.



- **Deselect All:** Deselect all the selected channels.
 **Deselect All** appears only when you have selected one or more channels.
- **Select All:** Select all the channels in the channel list. To use, choose **Select All** in the Options menu, and then press **ENTER** . All channels are selected and a check appears by each channel. You can then apply one of the other options on the Options menu to all the selected channels.



□ Memorizing Channels

■  MENU  → Channel → ENTER 

■ Antenna (Air / Cable)

Your TV memorizes channels and adds the memorized channels to the **Channel List** with the **Auto Program** function. Before your TV can memorize channels, you must specify the signal source, either **Air** or **Cable**. If you select **cable**, when you start **Auto Program**, you must also specify the cable system type, **STD**, **HRC**, or **IRC**. If you don't know your cable system type, contact your local cable company for the information. Most cable companies use **STD**.



To select **Air** or **Cable**, follow these steps:

1. Push **MENU** → **Channel** → **ENTER** on your remote.
 2. Select **Antenna**, and then press **ENTER**.
 3. Select the source of your TV signal, **Air** or **Cable**, and then press the **RETURN** button.
-  You can select both if you have both connected.



■ Auto Program

Scans for channels automatically and stores them in the TV's memory.

To start **Auto Program**, follow these steps:

1. Push **MENU** → **Channel** → **ENTER** on your remote.
2. Select **Auto Program**, and then press **ENTER**.
3. Select **Air** or **Cable** or both by highlighting and then pressing **ENTER**.
 - ⌚ If you selected **Air** or **Cable** or both on the Antenna screen, your choice will already be selected.
4. Select **Search** or **Next**, and then press **ENTER**.
5. If you selected **Cable**, the Cable System screen appears. Select **Analog Cable System**, and then press **ENTER**.
 - ⌚ If you selected **Air** only, **Auto Program** starts.



6. Select **STD**, **HRC**, or **IRC**, and then press **ENTER** .
7. Select **Search** or **Next**, and then press **ENTER** . **Auto Program** starts.

 After all the available channels are stored, **Auto Program** removes scrambled channels. When done, the **Auto Program** menu then reappears. This process can take up to 30 minutes

How to Stop Auto Programming

- 
- 
1. Press the **ENTER**  button.
 2. A message will ask **Stop Auto Program?** Select **Yes** by pressing the  or  button.
 3. Press the **ENTER**  button.

□ Other Features

■  **MENU**  → **Channel** → **ENTER** 

■ Fine Tune

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually. Scroll to the left or right until the image is clear.



-  Settings are applied to the channel you're currently watching.
-  Fine tuned channels that have been saved are marked with an asterisk “★” on the right-hand side of the channel number in the channel banner.
-  To reset the fine-tuning, select **Reset**.



■ Color System (Auto / PAL-N / NTSC)

Normally the TV can receive image and sound with good quality when in the mode auto. This mode detects the signal color system automatically. In case of some signal reception with color unsatisfactory, select the **Color System** Mode to **PAL-N** or **NTSC**.



□ Changing the Preset Picture Modes

☛ MENU  → Picture → Picture Mode → ENTER 

■ Picture Mode

Picture modes apply preset adjustments to the picture. Select a mode using the up and down arrow keys, and then press the ENTER  button.

☛ In **PC** mode, you can only select **Entertain** and **Standard**.

- **Dynamic**: Suitable for a bright room.
- **Standard**: Suitable for a normal environment.
- **Movie**: Suitable for watching movies in a dark room.
- **Entertain**: Suitable for watching movies and games.

☛ It is available in **PC** mode.



□ Adjusting Picture Settings

■  MENU  → Picture → ENTER 

■ Samsung MagicAngle

This feature allows you to see optimal screen quality according to your viewing position. When viewing the screen at an angle from below, above or the side of the TV, by setting the appropriate mode for each position you can obtain a similar picture quality as viewing the screen directly from the front.

- **Samsung MagicAngle (Off / Lean Back Mode / Standing Mode)**: Select the viewing from the front, a slightly or the upper position.
- **Mode (1-10)**: You can set suitable picture quality as needed.

■ Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

Your television has several options for adjusting picture quality. Select an option using the up and down arrow keys, and then press **ENTER** . Use the arrow keys to adjust the option value or select an option setting. When done, press **ENTER** .

-  When you make changes to **Backlight**, **Contrast**, **Brightness**, **Sharpness**, **Color** or **Tint (G/R)**, the OSD will be adjusted accordingly.
-  In **PC** mode, you can only make changes to **Backlight**, **Contrast**, **Brightness**, and **Sharpness**.
-  You can adjust and store settings for each external device connected to the TV.
-  Lowering picture brightness reduces power consumption.



□ Changing the Picture Size

■ MENU  → Picture → Screen Adjustment → ENTER 

■ Screen Adjustment

Screen Adjustment provides various picture size and aspect ratio options. Select an option using the up and down arrow keys, and press **ENTER** . Use the arrow keys to select an option in the sub-menu, and then press **ENTER** .

- **Picture Size:** If you have a cable box or satellite receiver, it may have its own set of screen sizes as well. However, we highly recommend you use your TV's 16:9 mode most of the time.

16:9: Sets the picture to 16:9 wide screen mode.



Zoom1: Use for moderate magnification. Cuts off the top and sides.

Zoom2: Use for a stronger magnification.

Wide Fit: Enlarges the aspect ratio of the picture so it fits the entire screen.

☒ Available with HD 1080i / 720p signals in 16:9 mode.

4:3: Sets the picture to (4:3) mode. For analog TV programs.

☒ Do not set your TV to 4:3 format for a long time. The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.

Screen Fit: When your TV inputs HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals, displays the full image without any cut-off.



- **Position**: Adjusts the picture position. **Position** is only available if **Picture size** is set to **Zoom1**, **Zoom2**, **Wide Fit**, or **Screen fit**.

☞ To use the **Position** function after selecting **Zoom1**, **Zoom2** or **Wide Fit**, follow these steps:

1. Press the ▼ button to select **Position**.
2. Press the **ENTER** ↵ button.
3. Press the ▲ or ▼ button to move the picture up or down.
4. When done, Press the **ENTER** ↵ button.

☞ If you want to reset the pictures to its original position, select **Reset** in the **Position** screen, and then press **ENTER** ↵. The picture will be reset to its default position.

 To use the **Position** function after selecting **Screen Fit** when connected to an HDMI (1080i/1080p) or Component (1080i/1080p) source, follow these steps:

1. Press the  button to select **Position**.
2. Press the **ENTER**  button.
3. Press the , ,  or  button to move the picture.
4. When done, Press the **ENTER**  button.

 If you want to reset the pictures to its original position, select **Reset** in the **Position** screen. The picture will be set to its default position.



- HD (High Definition): 16:9 - 1080i / 1080p (1920x1080), 720p (1280x720)
- You can adjust and store settings for each external device you have connected to an input on the TV.
- Picture Sizes available by Input Source:

Input Source	Picture Size
ATV, AV, Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
Component (1080i, 1080p), HDMI (720p, 1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit
PC	16:9, 4:3



□ Changing the Picture Options

■ Advanced Settings

👉 MENU III → Picture → Advanced Settings → ENTER ↵

Advance Settings are available in the **Standard** and **Movie** modes. In **PC** mode, you can only make changes to **Gamma** and **White Balance**.

To use, select an option using the up and down arrow keys, and then press **ENTER ↵**. Use the arrow keys to change a value or setting, and then press **ENTER ↵**.



- The displayed image may differ depending on the model.

- **Black Tone (Off / Dark / Darker / Darkest)**: Select the black level to adjust the screen depth.
- **Dynamic Contrast (Off / Low / Medium / High)**: Adjusts the screen contrast.
- **Shadow Detail (-2 ~ +2)**: Increase the brightness of dark images.
- **Gamma**: Adjusts the primary color intensity.
- **RGB Only Mode (Off / Red / Green / Blue)**: Displays the **Red**, **Green** and **Blue** color for making fine adjustments to hue and saturation.
- **Color Space (Auto / Native)**: Adjusts the range of colors (the color gamut) available to create images.



- **White Balance**: Adjusts the red, green, and blue brightness so that the brightest point of a picture becomes white.
- **R-Offset / G-Offset / B-Offset**: Adjusts each color's (red, green, blue) darkness.
- **R-Gain / G-Gain / B-Gain**: Adjusts each color's (red, green, blue) brightness.
- **Reset**: Resets the **White Balance** to its default settings.
- **Flesh Tone**: Emphasizes pink "Flesh Tone."
- **Edge Enhancement (Off / On)**: Emphasizes object boundaries.
- **Motion Lighting (Off / On)**: Reduces power consumption by reducing screen brightness when the picture on the screen is in motion.
 - ⚠ When changing the **Contrast**, **Motion Lighting** is set to **Off**.



■ Picture Options

■  MENU  → Picture → Picture Options → ENTER 

Select an option using the up and down arrow keys, and then press **ENTER** .

Use the arrow keys to change the setting, and then press **ENTER** .

 In **PC** mode, you can only make changes to **Color Tone**.

- **Color Tone (Cool / Normal / Warm1 / Warm2)**

 **Warm1** or **Warm2** will be deactivated when the picture mode is **Dynamic**.

 You can adjust and store settings for each external device connected to an input on the TV.



- The displayed image may differ depending on the model.

- **Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualization / Demo)**: If the broadcast signal received by your TV is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

☞ When the signal is weak, try each option until the the TV displays the best picture.

Auto Visualization: When changing analog channels, displays signal strength.

☞ When the bar is green, you are receiving the best possible signal.

- **MPEG Noise Filter (Off / Low / Medium / High / Auto)**: Reduces MPEG noise to provide improved picture quality.

- **HDMI Black Level (Normal / Low)**: Lets you select the black level on the screen to adjust the screen depth.
 - ☒ Available only in **HDMI** mode.
- **Film Mode (Off / Auto1 / Auto2)**: Sets the TV so that it senses and then processes film signals from all sources automatically and adjusts the picture for optimum quality.
 - ☒ Available in TV, AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).



■ Reset Picture (OK / Cancel)

Resets your current picture mode to its default settings.



□ Using the TV with Your PC

Set the input source to PC.

■ Auto Adjustment

 **MENU**  → **Picture** → **Auto Adjustment** → **ENTER** 

Automatically adjusts the picture's frequency, position, and fine tune settings in the **PC** mode.

 Available in **PC** mode only.

 Not available if you connect your **PC** with an HDMI to DVI cable.



■ PC Screen Adjustment

■  MENU  → Picture → Screen Adjustment → PC Screen Adjustment →  ENTER 

■ Available in **PC** mode only.

- **Coarse / Fine:** Removes or reduces picture noise. If the noise is not removed by Fine-tuning alone, use the **Coarse** function to adjust the frequency as best as possible (**Coarse**) and Fine-tune again. After the noise has been reduced, re-adjust the picture so that it is aligned to the center of screen.
- **Position:** To adjust the PC's screen position if it is not centered or does not fit the TV screen. Press the  or  button to adjust the Vertical Position. Press the  or  button to adjust the Horizontal Position.
- **Image Reset:** Resets the image to the default settings.

Using Your TV as a Computer (PC) Display

Entering the Video Settings (Based on Windows XP)

For your TV to work properly as a computer display, you must enter the correct video settings into your PC.

-  Depending on your version of Windows and your video card, the procedure on your PC will probably differ slightly from the procedure presented here. However, the same basic information will apply in most cases. (If not, contact your computer manufacturer or Samsung Dealer.)



1. On your PC, click “Control Panel” on the Windows start menu.
2. Click “Appearance and Themes” in the “Control Panel” window, A display dialog-box appears.
3. Click “Display”. Another display dialog box appears.
4. Click the “Settings” tab on the display dialog-box.
 - On the Settings tab, set the correct resolution.
 - If a vertical-frequency option exists on your display settings dialog box, select “60” or “60 Hz”. Otherwise, just click “OK” and exit the dialog box.



Installing the Device Driver

If you install the device driver, you can set up the appropriate resolution and frequency for the product.

To download the driver installation file, visit the Samsung website (<http://www.samsung.com>) and search for your product using the model name.

□ Changing the Preset Sound Modes

☛ MENU  → Sound → Sound Mode → ENTER 

■ Sound Mode

Use the up and down arrow keys to select an option, and then press ENTER .

- **Standard**: Selects the normal sound mode.
 - **Music**: Emphasizes music over voices.
 - **Movie**: Provides the best sound for movies.
 - **Clear Voice**: Emphasizes voices over other sounds.
 - **Amplify**: Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.
-  If **Speaker Select** is set to **External Speaker**, **Sound Mode** is disabled.



□ Adjusting Sound Settings

■ MENU  → Sound → ENTER 

■ Sound Effect

 If **Speaker Select** is set to **External Speaker**, **Sound Effect** is disabled.

- **SRS TruSurround HD (Off / On)**

(**Standard** sound mode only)

This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.



- **SRS TruDialog (Off / On)**

(**standard** sound mode only)

This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

- **Equalizer**

Adjusts the sound output.

- **Balance L/R:** Adjusts the balance between the right and left speaker.
- **100Hz / 300Hz / 1kHz / 3kHz / 10kHz** (Bandwidth Adjustment): Adjusts the volume level of specific bandwidth frequencies.
- **Reset:** Resets the equalizer to its default settings.



■ Broadcast Audio Options

- **Multi-Track Sound (MTS)**

Select an option using the up and down arrow keys, and then press **ENTER** ▶.

Mono: Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.

Stereo: Choose for channels that are broadcasting in stereo.

SAP: Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.

☞ Depending on the program being broadcast, you can listen to **Mono**, **Stereo**, or **SAP**.



■ SPDIF Output

The SPDIF (Sony Philips Digital InterFace) outputs an uncompressed digital audio signal when you connect the digital audio jack on the back of the TV to a digital audio in jack on a receiver or home theater.

- **Audio Format (PCM / Dolby Digital)**: You can select the Digital Audio output (SPDIF) format.

☞ The available Digital Audio output (SPDIF) format may differ depending on the input source.

- **Audio Delay**: Lets you correct timing mismatches between the audio track and the video when you are watching the TV and listening to digital audio output from the TV through an external device such as an AV receiver. When you select **Audio Delay**, a slider appears. Use the left and right arrow buttons to adjust the slider. Press **ENTER** ↵ when done (0ms ~ 250ms).

■ Speaker Settings

- **Speaker Select (External Speaker / TV Speaker)**

If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the TV's speakers and the speakers attached to your audio receiver. If this occurs, set the TV to **External Speaker**.

- ☞ When you set **Speaker Select** to **External Speaker**, the TV's speakers are turned off. You will hear sound through the external speakers only. When you set **Speaker Select** to **TV Speaker** both the TV's speakers and the external speakers are on. You will hear sound through both.
- ☞ When **Speaker Select** is set to **External Speaker**, the **- VOL+** and **MUTE** buttons will not operate and the sound settings will be limited.
- ☞ If there is no video signal, both speakers will be mute.

- **Auto Volume (Off / Normal / Night)**

Normal equalizes the volume level on each channel, so that when you change channels, the volume level is the same. **Night** equalizes and decrease the volume level on each channel, so each channel is quieter. **Night** is useful at night, when you may want to keep the volume low.



■ Reset Sound (OK / Cancel)

Reset all sound settings to the factory defaults. Select **Reset**, press **ENTER** , select **OK** on the pop-up, and then press **ENTER**  again.



□ Setting the Time

☞ MENU☰ → System → Time → ENTER➡

■ Time

- ☞ The current time will appear every time you press the **INFO** button.
- **Clock:** Select Date or Time, and then press **ENTER➡**. Use the number buttons to enter numbers or press the up and down arrow buttons. Use the left and right arrow buttons to move from one entry field to the next. Press **ENTER➡** when done.
- ☞ You can set the **Month**, **Day**, **Year**, **Hour** and **Minute** directly by pressing the number buttons on the remote control.



Using the Sleep Timer

⌚ MENU☰ → System → Time → Sleep Timer → ENTER➡

- **Sleep Timer** TOOLS➡: Automatically shuts off the TV after a preset period of time (30, 60, 90, 120, 150 and 180 minutes).

✍ Use the up and down arrows to select a period of time, and then press ENTER➡. To cancel **Sleep Timer**, select Off.



Setting the On / Off Timer

⌚ MENU☰ → System → Time → ENTER➡

- Set **On Timer** so that your TV turns on automatically at a time and on a day of your choosing.
- **On Timer:** You can set up three separate **On Timer** configurations. (**On Timer 1**, **On Timer 2**, **On Timer 3**)
⌚ You must set the clock before you can use **On Timer**.



- The displayed image may differ depending on the model.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual**.

If you select **Manual**, you can choose the days you want **On Timer** to turn on your TV.

 The  mark indicates days you've selected.

On Time: Set the hour, minute, am/pm. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.

Volume: Set the desired volume level. Use the left and right arrow buttons to change the volume level.



Source: Select **TV** or **USB**. Select TV and the TV will display broadcast or cable TV programs when it turns on automatically. Select USB and the TV will play content from a USB device when the TV turns on automatically. (You can select USB only when a USB device is connected to the TV)

Antenna (when the **Source** is set to **TV**): Select **Air** or **Cable**.

Channel (when the **Source** is set to **TV**): Select the desired channel.

Music / Photo (when the **Source** is set to **USB**): Select a folder in the USB device containing music or photo files you want played when the TV turns on automatically.



 NOTE

- If there is no music file on the USB device or you don't select a folder containing a music file, the Timer function does not operate correctly.
- If there is only one photo file in the USB, the Slide Show will not play.
- If a folder name is too long, the folder cannot be selected. Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- We recommend that you use a USB memory stick and a multi card reader when using **On Timer**. The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because the TV can take too long to recognize these devices.

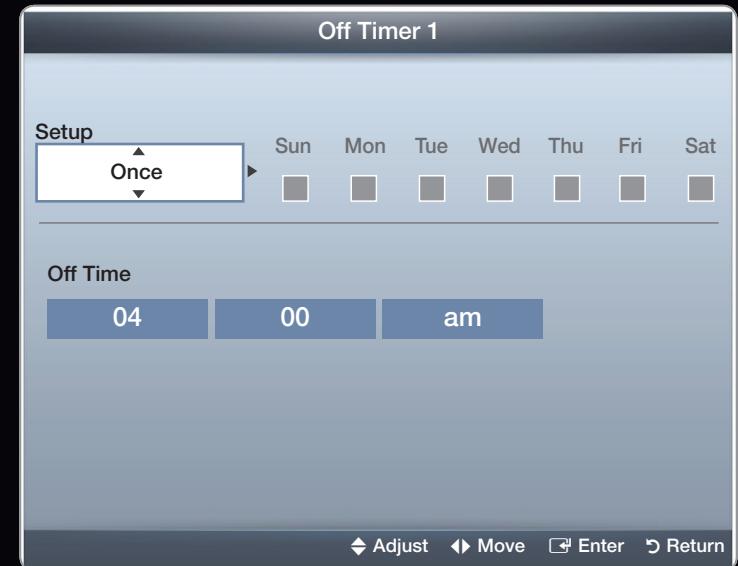
- **Off Timer:** You can set up three separate Off Timer configurations. (**Off Timer 1**, **Off Timer 2**, **Off Timer 3**)

 You must set the clock before you can use **Off Timer**.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual**. If you select **Manual**, you can choose the days you want **Off Timer** to turn off your TV.

 The  mark indicates days you've selected.

Off Time: Set the **hour**, **minute**, and **am/pm**. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.



- The displayed image may differ depending on the model.

□ Blocking Programs

▣  MENU  → System → Security → ENTER 

■ Security

When you access the Security functions for the first time, the PIN input screen appears. Enter a 4 digit PIN you will remember. The PIN screen closes and the Security Menu appears. Every time you access the Security functions, the PIN screen will appear and you must enter that PIN.

- **Channel Lock (Off / On)**: When turned on, the **Channel Lock** feature can automatically block programs that you deem inappropriate for your children.

You must enter a PIN (personal identification number) before you can set or change any of the **Channel Lock** restrictions.

 **Channel Lock** is not available in **HDMI**, **Component** or **PC** mode.

 The default PIN number for a new TV set is “0-0-0-0”.

- **Change PIN:** The **Change PIN** screen will appear. Choose any 4 digits for your PIN and enter it in **Enter New PIN**. Re-enter the same 4 digits. in **Confirm New PIN**. When the Confirm screen disappears, press the OK button. The TV has memorized your new PIN.



How to watch a restricted program or movie

If the TV is tuned to a restricted program or movie, the **Channel Lock** will block it.

The screen will go blank and the following message will appear:

This channel is blocked by **Channel Lock**. Please enter the PIN to unblock Enter the PIN to unblock. the program or movie.

- ⌚ If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to “0-0-0-0”: **MUTE** → **8** → **2** → **4** → **POWER** (on).



□ Economical Solutions

■ Eco Solution

👉 MENU☰ → System → Eco Solution → ENTER➡

- **Energy Saving (Off / Low / Medium / High / Picture Off)**: This adjusts the brightness of the TV in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.



- **No Signal Power Off (Off / 15 min. / 30 min. / 60 min.)**: To avoid unnecessary energy consumption, you can set how long you want the TV to remain on if it's not receiving a signal.
☒ Disabled when an attached PC is in power saving mode.
- **Auto Power Off (Off / On)**: Saves power by turning TV off automatically when no user operation is received for 4 hours.



□ Picture In Picture (PIP)

■  MENU  → System → PIP → ENTER 

■ PIP

You can watch a program whose signal has passed through the TV's tuner and the video from one external video source simultaneously. For example, if you have a cable box connected to the Cable In jack, you can use PIP to watch programs from the cable box and a movie from a Blu-ray player attached to the HDMI In jack.



 NOTE

- For PIP sound, refer to the **Sound Select** instructions.
- If you turn the TV off while watching in the PIP mode, the PIP function is reset to off. When you turn your TV on, you must turn PIP on again to watch in the PIP mode.
- You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.



- PIP Settings

The picture from the external video source will be in the main screen and the picture from the TV's tuner will be in the PIP sub-picture window.

Main picture	Sub picture
Component, HDMI, PC	TV



- **PIP (Off / On)**: Activate or deactivate the PIP function.
- **Air/Cable (Air / Cable)**: Select either **Air** or **Cable** as the input source for the sub-screen.
- **Channel**: Select the channel for the sub-screen.
- **Size** (□ / □): Select a size for the subpicture.
- **Position** (□ / □ / □ / □): Select a position for the sub-picture.
- **Sound Select (Main / Sub)**: You can choose to listen to the sound from the **Main** picture or the **Sub** picture.



□ Other Features

☛ MENU  → System → ENTER 

■ Menu Language

Set the menu language.

1. Select **Menu Language**, and then press the **ENTER ** button.
 2. Choose a language, and then press the **ENTER ** button.
-  Choose from **English** and **Español**.



■ Caption

(On-Screen Text Messages)

- **Caption (Off / On)**: You can switch the caption function on or off. If captions are not available, they will not be displayed on the screen.

 The **Caption** feature does not work with devices connected to the TV through the **Component**, **HDMI** or **PC** input jacks.

- **Caption Mode**: You can select the desired caption mode.

 The availability of captions depends on the program being broadcast.

Default / CC1~CC4 / Text1~Text4: The Analog Caption function operates in either analog TV channel mode or when a signal is supplied from an external device to the TV.



- **Auto Protection Time (Off / 2hours / 4hours / 8hours / 10hours):** If the screen displays a still image for a certain period of time you define, the TV activates the screen saver to prevent the formation of burnt in ghost images on the screen.



■ General

- **Max. Power Saving (Off / On):** Conserve power by turning the monitor off when the PC is not used for a specified period.
- **Game Mode (Off / On):** When you have connected a game console such as a PlayStation™ or Xbox™ to the TV, you can enjoy a more realistic gaming experience if you set **Game Mode** on.

☒ Precautions and limitations for **Game Mode**:

- Before disconnecting a game console and connecting another external device, set **Game Mode** to **Off** in the **System** menu.
- If you display the TV menu in **Game Mode**, the screen shakes slightly.

☒ **Game Mode** is not available when the input source is set to TV or PC.

☒ Set **Game Mode** to **On** only after connecting a game console. If you turn **Game Mode** on before you have attached the game console, you may notice reduced picture quality.

 If **Game Mode** is On:

- **Picture** mode is set to **Standard** and **Sound** mode is set to **Movie**.
- **Menu Transparency (Bright / Dark)**: Set the Transparency of the menu.
- **Boot Logo (Off / On)**: Display Samsung logo when the TV is turned on.
- **AV Color System (Auto / PAL-M / PAL-N / NTSC)**: Normally the TV can receive image and sound with good quality when in the mode **Auto**. This mode detects the signal color system automatically. In case of some signal reception with color unsatisfactory, select the **AV Color System** Mode to **PAL-M**, **PAL-N** or **NTSC**.



■ Anynet+ (HDMI-CEC)

For details on set up options, refer to the “Anynet+ (HDMI-CEC)” instructions.



■ DivX® Video On Demand

Shows the registration code authorized for the TV. If you connect to the DivX web site and register, you can download the VOD registration file. If you play the VOD registration using My Contents, the registration is completed.

 For more information on DivX® VOD, visit “<http://vod.divx.com>”.



Support Menu

 **MENU**  → **Support** → **ENTER** 

e-Manual

The **e-Manual** is built into your TV. Open the **e-Manual** to learn how to use your TV's many features.

 For the detailed information about the e-Manual Screen, refer to “How to view the e-Manual” in the Users Manual.



■ Self Diagnosis

- **Picture Test:** Use to check for picture problems. **Picture test** displays a high definition picture that you can examine for flaws or faults.
Yes: Select Yes if the test picture does not appear or there is noise or distortion in the test picture. There may be a problem with the TV. Contact Samsung's Call Center for assistance.
No: Select No if the test picture displays properly. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.



- **Sound Test:** Use the built-in melody sound to check for sound problems.
 - ☒ If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV Speaker** in the **Sound** menu.
 - ☒ The melody will be heard during the test even if **Speaker Select** is set to **External Speaker** or the sound is muted by pressing the **MUTE** button.
- Yes:** Select **Yes** if you can hear sound from only one speaker or from neither speaker during the sound test. There may be a problem with the TV. Contact
- No:** Select **No** if you can hear sound from the speakers. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.



- **Troubleshooting:** Displays a troubleshooting guide organized into four symptom categories: Poor or Distorted Picture, Distorted Sound or No Sound, RF or PC Issues, and Other Issues. If your TV seems to be having a problem, access the trouble shooting guide for a solution.



■ Software Upgrade

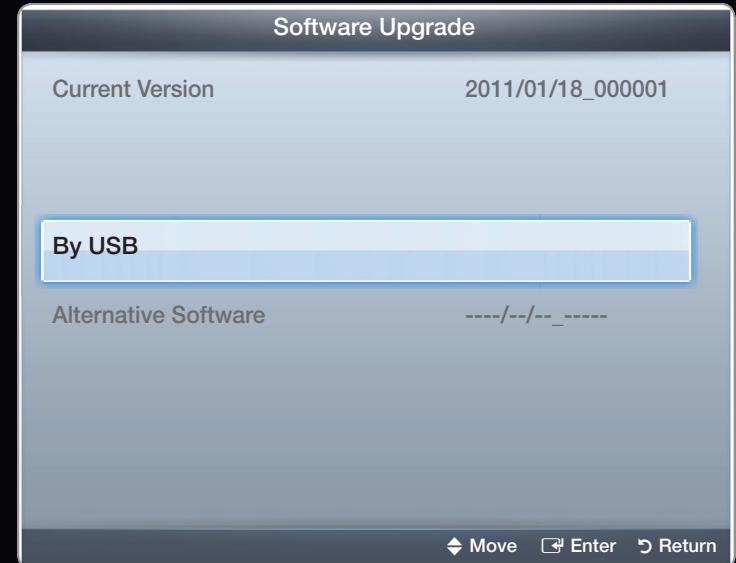
The **Software Upgrade** menu lets you upgrade your TV's software to the latest version.

- **Current Version:** This is the software version already installed in the TV.

◀ The current version is displayed in the following format: Year / Month / Day_Version number.

Be careful not to turn off the power until the upgrade is complete. The TV will turn off and on automatically after completing the firmware upgrade. When you upgrade software, all video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

▶



- The displayed image may differ depending on the model.

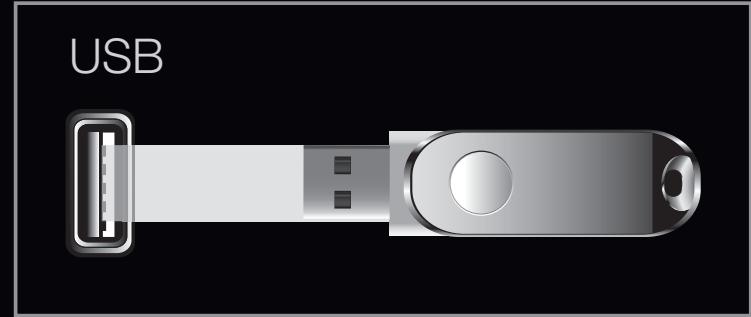
- **By USB**

Upgrading to the Latest Version

To upgrade **By USB**, follow these steps:

1. Visit www.samsung.com.
2. Download the latest USB software upgrade exe archive to your computer.
3. Extracts the exe archive to your computer. You should have a single folder with the same name as the exe file.
4. Copy the folder to a USB flash drive.
5. Turn on the TV, and then insert the USB flash drive into the USB port of the TV.
6. In the TV's menu, go to **Support** → **Software Upgrade**.
7. Select **By USB**.

 Please be careful not to remove the USB drive until the upgrade is complete.



- The position of the USB port may differ depending on the model.



- **Alternative Software**

If there is an issue with the new firmware and it is affecting operation, you can change the software to the previous version.

⌚ If the software was changed, existing software is displayed.



■ Contact Samsung

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centers and how to download products and software.



Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

NOTE

- You can only control Anynet+ devices using the TV remote control, not the buttons on the TV.
- The TV remote control may not work under certain conditions. If this occurs, reselect the Anynet+ device.
- The Anynet+ functions do not operate with other manufacturers' products.



- For instructions explaining how to connect Anynet+ external devices, refer to the device's user manual.
- You must connect an Anynet+ device using an HDMI cable. Some HDMI cables may not support Anynet+ functions.
- Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.
- Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.



- However, you can connect only one Anynet+ Home Theater. To connect an Anynet+ Home Theater, connect the Home Theater to the TV using an HDMI cable then:
 - To hear sound from the Home Theater's Front, Left and Right speakers and the subwoofer only, connect a Digital Optical cable between the **DIGITAL AUDIO OUT (OPTICAL)** jack on your TV and the Digital Audio Input on the Home Theater.
 - To hear 5.1 channel audio, connect HDMI cables to your **Anynet+** DVD player, satellite box, etc. Then, connect the **DIGITAL AUDIO OUT (OPTICAL)** jack on your DVD player, Satellite Box, etc. (i.e. Anynet + Device 1 or 2) directly to the Home Theater, not the TV.



Anynet+ Menu

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the TV.

Anynet+ Menu	Description
View TV	Changes Anynet+ mode to TV broadcast mode.
Device List	Shows the Anynet+ device list.
(device_name) MENU	Shows the connected device menus. E.g. if a DVD player recorder is connected, the disc menu of the DVD player recorder will appear.
(device_name) Tools	Shows the tools menu of the connected device. E.g. if a DVD player recorder is connected, the play menu of the DVD player recorder will appear.  Depending on the device, this menu may not be available.



Anynet+ Menu	Description
(device_name) Title Menu	Shows the title menu of the connected device. E.g. If a DVD player recorder is connected, the title menu of the movie in the DVD player recorder will appear.  Depending on the device, this menu may not be available.
Receiver	Sound is played through the receiver.



□ Setting Up Anynet+

■ MENU  → System → Anynet+ (HDMI-CEC) → ENTER 

■ Anynet+ (HDMI-CEC) (Off / On)

To use the Anynet+ Function, you must set **Anynet+ (HDMI-CEC)** to **On**.

■ When the **Anynet+ (HDMI-CEC)** function is disabled, all the Anynet+ related operations are deactivated.



■ Auto Turn Off (No / Yes)

Set an Anynet+ Device to turn off automatically when the TV is turned off.

- ▣ If **Auto Turn Off** is set to **Yes**, running external devices will turn off at the same time as the TV turns off. However, a device may not turn off if a recording is in progress.
- ▣ **Auto Turn Off** may not be enabled depending on the device.



□ Switching between Anynet+ Devices

1. Press the **TOOLS** button, select **Anynet+ (HDMI-CEC)**, and then press **ENTER** .
2. Select Device List, and then press the **ENTER**  button.
 -  If you cannot find a device you want, press the **A** button to refresh the list.
3. Select a device, and then press the **ENTER**  button. You can switch to the selected device.



 The **Device List** menu appears only when you set **Anynet+ (HDMI-CEC)** to **On** in the **System** menu.

- Switching to the selected device may take up to 2 minutes. You cannot cancel the operation during the switching operation.
- If you have selected an Anynet+ device by pressing the **SOURCE** button and then selecting its input source, you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device by using the **Device List**.



□ Listening through a Receiver

You can listen to sound through a receiver (i.e Home Theater) instead of the **TV Speaker**.

1. Select **Receiver** and set to **On**.
2. Press the **EXIT** button to exit.

- ☞ If your receiver supports audio only, it may not appear in the device list.
- ☞ The receiver will work when you have properly connected the optical in jack of the receiver to the **DIGITAL AUDIO OUT (OPTICAL)** jack of the TV.
- ☞ When the receiver (i.e Home Theater) is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a TV (air) signal, the TV will send out 5.1 channel sound to the receiver. When the source is a digital component such as a DVD and is connected to the TV via HDMI, only 2 channel sound will be heard from the receiver.

□ Troubleshooting for Anynet+

Problem	Possible Solution
Anynet+ does not work.	<ul style="list-style-type: none">• Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only.• Only one receiver (home theater) can be connected.• Check if the Anynet+ device power cord is properly connected.• Check the Anynet+ device's Video/Audio/HDMI cable connections.• Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu.• Check whether the TV remote control is in TV mode.• Check whether the remote control is Anynet+ compatible.• Anynet+ doesn't work in certain situations. (Searching channels, operating My Contents or Plug & Play (initial setup), etc.)• When connecting or removing the HDMI cable, please make sure to search devices again or turn your TV off and on again.• Check if the Anynet+ Function of Anynet+ device is set on.



I want to start Anynet+.	<ul style="list-style-type: none">Check if the Anynet+ device is properly connected to the TV and check if the Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu.Press the TOOLS button to display the Anynet+ menu and select a menu you want.
I want to exit Anynet+.	<ul style="list-style-type: none">Select View TV in the Anynet+ menu.Press the SOURCE button on the TV remote control and select a non- Anynet+ device.Press ▼ CH ▲ and PRE-CH to change the TV mode. (Note that the channel button operates only when a tuner-embedded Anynet+ device is not connected.)
The message “Connecting to Anynet+ device...” appears on the screen.	<ul style="list-style-type: none">You cannot use the remote control when you are configuring Anynet+ or switching to a view mode.Use the remote control after the TV has completed Anynet+ configuration or has finished switching to Anynet+.
The Anynet+ device does not play.	<ul style="list-style-type: none">You cannot use the play function when Plug & Play (initial setup) is in progress.

The connected device is not displayed.

- Check whether or not the device supports Anynet+ functions.
- Check whether or not the HDMI cable is properly connected.
- Check whether **Anynet+ (HDMI-CEC)** is set to **On** in the Anynet+ setup menu.
- Search Anynet+ devices again.
- Anynet+ requires an HDMI connection. Make sure the device is connected to your TV with an HDMI cable.
- Some HDMI cables may not support Anynet+ functions.
- If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.

The TV sound is not output through the receiver.

- Connect the optical cable between TV and the receiver.

□ Using the My Contents

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC) device and/or your PC

1. Press the **CONTENT** button.
2. Press the **▲ / ▼ / ◀ / ▶** button to select **Videos**, **Photos**, or **Music**, and then press the **ENTER**  button.
 - ☞ To view content on a USB device, you must plug the device into a **USB** jack on the TV.
 - ☞ To view content located on your PC, you must have connected your TV and your PC to your LAN and downloaded and installed PC Share Manager on your PC.

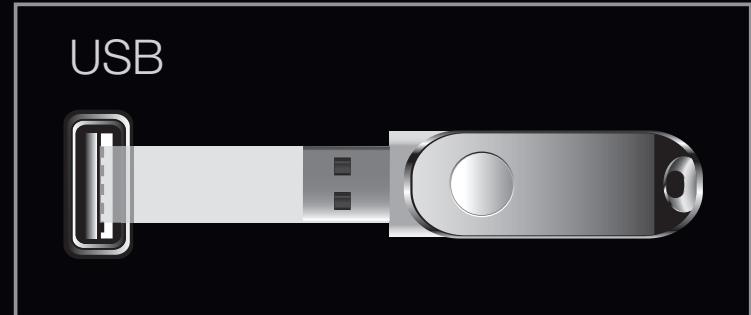


- The displayed menu may differ depending on the model.

□ Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music and/or movie files to the USB jack on the side of the TV.
3. When a USB device is connected to the TV, the **Connected Device** window appears. Select a connected device, and then press **ENTER** ↴.

☞ The TV may display the files on the USB device automatically if it is the only device connected.



- The position of the USB port may differ depending on the model.



 The USB function might not work properly with unlicensed multimedia files.

 Read this information before using **My Contents** with a USB device:

- MTP (Media Transfer Protocol) is not supported.
- The file system supports FAT16, FAT32 and NTFS. Note that the supported maximum file size is 2GB for FAT16 and 4GB for FAT32.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- Available only the Sequential jpeg format.
- **My Contents** only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the TV's USB port.



- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- USB (HDD) is not supported.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360 x 8640 pixels.
- If a file is corrupted or the TV does not support the file type, the “Not Supported File Format” message appears.



- If the files are sorted by **Folder View**, up to 1000 files can be displayed in each folder.
- The TV cannot play MP3 files with DRM that have been downloaded from a for-pay site. Digital Rights Management (DRM) is a technology that supports the creation, distribution and management of the digital content in an integrated and comprehensive way, including protection the rights and interests of the content providers, preventing illegal copying of contents, and managing billings and settlements.



- If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.
- If the TV has been no input during the time set in **Auto Protection Time**, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when connected to the TV.
- If you use a USB extension cable, the TV may not recognize the USB device or may not be able to read the files on the device.
- If a USB device connected to the TV is not recognized, the list of files on the device is corrupted, or a file in the list is not played, connect the USB device to a PC, format the device and check the connection.
- If a file deleted from the PC is still found when you run **My Contents**, is run, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.



□ My Contents Selection Screen

To play a file, move to the file using the / / / buttons, and then press the **ENTER** or (Play) button. The TV plays the file. The **My Contents** screen may differ depending on the way you enter the screen.



- The displayed image may differ depending on the model.

Operation Buttons:

- Yellow (**Edit Mode**): Lets you select music by checking the files you want to play. Only available in **Music**.
- Blue (**Sorting**): Selects the sort list.
- / (**Page**): Move to next or previous page.
- **Tools**: Displays the option menu.
- **Return**: Move to the previous page or step.

Playing a Video

1. Press the **◀ / ▶ / ▲ / ▼** button to select the desired video in the file list.
2. Press the **ENTER ↴** button or **▶ (Play)** button.
 - The file name appears on the top with its playing time.
 - If video time information is unknown, the playing time and progress bar are not displayed.



- The displayed image may differ depending on the model.

- During video playback, you can search using the ◀ and ▶ buttons.
 - You can use the ◀◀ (REW), ▶▶ (FF), Pause, Stop, and Play buttons on the bottom of your remote during playback.
 - Press the **RETURN** button to exit the movie
- ⓘ In this mode, you can play movie clips contained in a game, but you cannot play the game itself
- Supported Video Subtitle Formats (for language subtitles, etc.)



Name	File extension	Format
MPEG-4 time-based text	.txt	XML
SAMI	.smi	HTML
SubRip	.srt	string-based
SubViewer	.sub	string-based
Micro DVD	.sub or .txt	string-based

- Supported Subtitle Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi *.mkv	AVI MKV	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / DTS Core
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	640x480	6 ~ 30	8	
*.asf	ASF	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	640x480	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	MP3 / ADPCM / AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	



File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.3gp	3GPP	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	ADPCM / AAC / HE-AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.vro	VRO	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM
	VOB	MPEG2	1920x1080	24 / 25 / 30	30	
*.mpg *.mpeg	PS	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM / AAC
		MPEG2	1920x1080	24 / 25 / 30	30	
		H.264	1920x1080	6 ~ 30	25	
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24 / 25 / 30	30	AC3 / AAC / MP3 / DD+ / HE-AAC
		H.264	1920x1080	6 ~ 30	25	
		VC1	1920x1080	6 ~ 30	25	



Other Restrictions

NOTE

- If there are problems with the contents of a codec, the codec will not be supported.
- If the information for a Container is incorrect and the file is in error, the Container will not be able to play correctly.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Frame/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Some USB/digital camera devices may not be compatible with the TV.



Video Decoder	Audio Decoder
<ul style="list-style-type: none"> Supports up to H.264, Level 4.1 H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. XVID, MPEG4 SP, ASP: <ul style="list-style-type: none"> Below 1280 x 720: 60 frame max Above 1280 x 720: 30 frame max GMC is not supported. 	<ul style="list-style-type: none"> Supports up to WMA 7, 8, 9, STD WMA 9 PRO does not support 2 channel excess multi channel or lossless audio. WMA sampling rate 22050Hz mono is not supported.



Playing movie continuously (Resume Play)

If you exit a movie when it is playing, you can play the movie later from the point where you stopped it.

1. Select the movie file you stopped and want to resume by pressing the **◀** or **▶** button to select it from the file list section.
2. Press the **▶** (Play) or **ENTER**  button.
3. Press the **D** button to select **Play Continuously** (Resume Play). The Movie will begin to play from where you stopped it.

 **Play Continuously** (Resume Play) is only available when you resume playing a movie you had stopped.

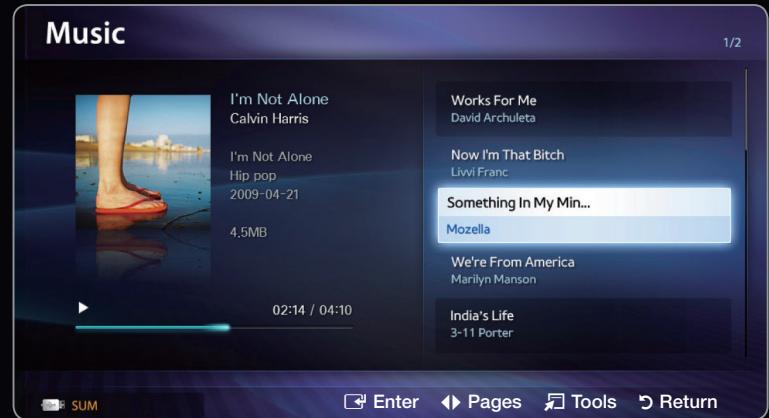


- The displayed image may differ depending on the model.

Playing Music

1. Press the / / / button to select the desired Music in the file list.
2. Press the **ENTER** button or (Play) button.
 - When the music is playing you can search using the (REW) and (FF) buttons.

- My Contents** only displays files with MP3 file extensions. Other file extensions are not displayed, even if they are saved on the same USB device.
- If the sound is abnormal when you play MP3 files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)



- The displayed image may differ depending on the model.

Playing selected music

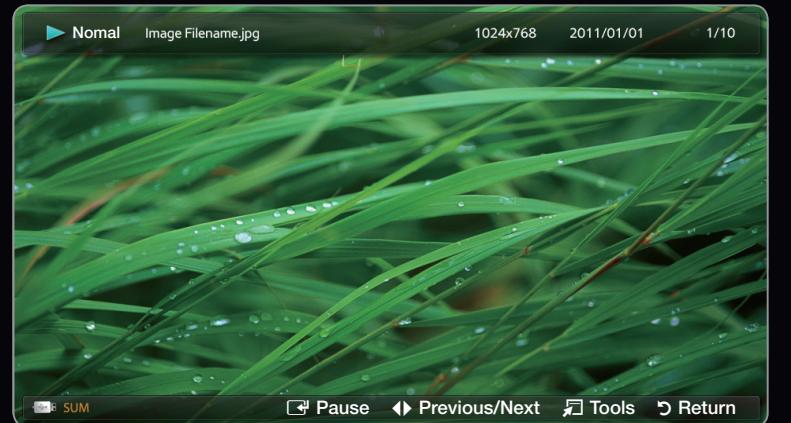
1. Press the **C** (**Edit Mode**) button. A check box appears on the left side of all the music files.
2. Using the arrow keys, highlight a file you want to play, and then press **ENTER** ↴.
 - ▣ A check appears in the check box of the selected file.
3. Repeat for each file you want to play.
4. Press the **TOOLS** button, and then select **Play Selected Contents**.

◀ ▶

- ▣ You can select or deselect all music by pressing the **Select All/Deselect All**. You can select or deselect a single file by pressing the **ENTER** ↴ button.

Viewing a Photo (or Slide Show)

1. Press the / / / button to select the desired photo in the file list.
2. Press the **ENTER** button.
 - To view files manually, one at a time, press the or arrow buttons.
 - To start the slide show, press the **ENTER** button when the file you selected is displayed.
 - During the slide show, all files in the file list are displayed in order, starting from the file you selected



- The displayed image may differ depending on the model.

- When you press the ▶ (Play) button in the file list, the slide show will start immediately.
- During a Slide show, press the **TOOLS** button to access additional functions such as **Slide Show Speed**, **Background Music**, **Zoom**, and **Rotate**.
- You can add background music to a slide show if you have music files on your USB device or PC by setting **Background Music** to **On** in the **Tools** menu, and then selecting music files to play.
- The **Background Music** cannot be changed until the BGM has finished loading.

- You can use the Pause, Stop, and Play buttons on the bottom of your remote during a slide show.
- When you press the Stop or Return button, the slide show stops and the main photo screen reappears.



□ My Contents - Additional Functions

Sorting the file list

Press the **D** button in the file list to sort the files.



Category	Operation	Videos	Music	Photos
Folder View	Displays the whole folder. You can view the photo by selecting the folder.	✓	✓	✓
Title Search	Sorts and displays the file title in Alphabet/Number/Symbol order.	✓	✓	✓
Latest Date	Sorts and shows files by the latest date.	✓		✓
Earliest Date	Sorts and shows files by the earliest date.	✓		✓
Artist	Sorts the music file by artist in alphabetical order.		✓	
Album	Sorts the music file by album in alphabetical order.		✓	
Genre	Sorts music files by the genre.		✓	
Monthly	Sorts and shows photo files by month.			✓

Videos/Music/Photos Play Option menu

When playing a file, press the **TOOLS** button. The Option Menu appears. Checks in the table below indicate which media the options apply to.

Category	Operation	Videos	Music	Photos
Title Search	You can move the other file directly.	✓		
Time Search	You can search the video using ◀ and ▶ button at one minute interval or entering the number directly.	✓		
Shuffle Mode	You can play the music randomly.		✓	



Category	Operation	Videos	Music	Photos
Repeat Mode	You can play movie and music files repeatedly.	✓	✓	
Picture Size	You can adjust the picture size to your preference.	✓		
Picture Mode	You can select the Picture Mode .	✓		✓
Sound Mode	You can select the Sound Mode .	✓	✓	✓
Subtitle Language	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.	✓		



Category	Operation	Videos	Music	Photos
Subtitle Setting	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.	✓		
Audio	You can enjoy a video in one of the supported languages. The function is only enabled when you play stream-type files which support multiple audio formats.	✓		
Start Slide Show / Pause Slide Show	You can start or pause a Slide Show.			✓
Slide Show Speed	You can select the slide show speed during the slide show.			✓
Background Music	You can turn background music on and off when watching a Slide Show.			✓



Category	Operation	Videos	Music	Photos
Background Music Setting	You can select background music when watching a Slide Show.			✓
Zoom	You can zoom into images in full screen mode. Use the ENTER  button to increase or decrease the zoom. Use the arrow buttons to select the area to enlarge.			✓
Rotate	You can rotate images in full screen mode. Use the left and right arrow buttons to rotate the picture. The rotation is only temporary.			✓
Information	You can see detailed information about the played file.	✓	✓	✓

- ◀   Pressing the **INFO** button while a device name is selected will display information about the selected device name.
- ◀ Pressing the **INFO** button while a file is selected will display information about the selected file.

□ TroubleShooting

If the TV seems to have a problem, first review this list of problems and solutions. If none of these troubleshooting tips apply, visit samsung.com, then click on Support, or call Samsung customer service at 1-800-SAMSUNG.

Issues	Solutions and Explanations
Picture Quality	<p>First, perform the Picture Test and to see if your TV is properly displaying the test image.</p> <ul style="list-style-type: none">● Go to MENU - Support - Self Diagnosis - Picture Test <p>If the test image is properly displayed, the poor picture may be caused by the source or signal.</p>



Issues	Solutions and Explanations
The TV image does not look as good as it did in the store.	<p>Store displays are typically tuned to digital, HD (high definition) channels.</p> <ul style="list-style-type: none"> • If you have an analog cable/set top box, upgrade to a digital set top box. • Use HDMI or Component cables to deliver HD (high definition) picture quality. • Cable/Satellite subscribers: Try HD stations from the channel line up. • Antenna connection: Try HD stations after performing an Auto program.
The picture is distorted: macro block error, small block, dots, pixelization	<ul style="list-style-type: none"> • The compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. • A weak signal can cause picture distortion. This is not a TV issue. • Mobile phones used close to the TV (within 3.3 ft.) may cause noise in the picture on TV.



Issues	Solutions and Explanations
Color is wrong or missing.	<ul style="list-style-type: none">• If you're using a component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.
There is poor color or brightness.	<ul style="list-style-type: none">• Adjust the Picture options in the TV menu (go to Picture Mode / Color / Brightness / Sharpness)• Adjust the Energy Saving option in the TV menu (go to MENU – System – Eco Solution – Energy Saving)• Try resetting the picture to view the default picture settings (go to MENU - Picture - Reset Picture)



Issues	Solutions and Explanations
There is a dotted line on the edge of the screen.	<ul style="list-style-type: none">• If the picture size is set to Screen Fit, change it to 16:9.• Change the cable/satellite box resolution.
The picture is black and white.	<ul style="list-style-type: none">• If you are using an AV composite input, connect the video cable (yellow) to the Green jack of Component input 1 on the TV.
When changing channels, the picture freezes or is distorted or delayed.	<ul style="list-style-type: none">• If connected to a cable box, try to reset the box. (Disconnect and then reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes.)• Set the output resolution of the cable box to 1080i or 720p.



Issues	Solutions and Explanations
Sound Problem	<p>First, perform a Sound Test to confirm that your TV audio is properly operating. (go to MENU - Support - Self Diagnosis - Sound Test)</p> <p>If the audio is OK, the sound problem may caused by the source or signal.</p>
There is no sound or the sound is too low at maximum volume.	<ul style="list-style-type: none"> ● Please check the volume of the device (Cable/Sat Box, DVD, Blu-ray etc) connected to your TV.
The picture is good but there is no sound.	<ul style="list-style-type: none"> ● Set the Speaker Select option to TV Speaker in the Sound menu. ● If you are using an external device, make sure the audio cables are connected to the correct audio input jacks on the TV. ● If you are using an external device, check the device's audio output option (ex. you may need to change your cable box's audio option to HDMI when you have a HDMI connected to your TV). ● If you are using a DVI to HDMI cable, a separate audio cable is required. ● If your TV has a headphone jack, make sure there is nothing plugged into it. ● Reboot the connected device by reconnecting the device's power cable.



Issues	Solutions and Explanations
The speakers are making an inappropriate noise.	<ul style="list-style-type: none">Check the cable connections. Make sure a video cable is not connected to an audio input.For antenna or Cable connections, check the signal strength. Low signal level may cause sound distortion.Perform the Sound Test as explained above.
No Picture, No Video The TV turns off automatically.	<ul style="list-style-type: none">Ensure the Sleep Timer is set to Off in the System menu.If your PC is connected to the TV, check your PC power settings.Make sure the AC power cord is plugged in securely to the wall outlet and the TV.When watching TV from an antenna or cable connection, the TV will turn off after 10 - 15 minutes if there is no signal.



Issues	Solutions and Explanations
RF(Cable/Antenna) Connection	
<p>The TV is not receiving all channels.</p> <p>The picture is distorted: macro block error, small block, dots, pixelization.</p>	<ul style="list-style-type: none"> ● Make sure the coaxial cable is connected securely. ● Please try Auto Program to add available channels to the channel list. Go to MENU - Channel - Auto Program then select Auto and make sure the correct Cable TV signal type is set in the menu. There are 3 options (STD, HRC and IRC) ● Verify the Antenna is positioned correctly. <ul style="list-style-type: none"> ● Compression of video contents may cause picture distortion, especially with fast moving pictures such as sports and action movies. ● A weak signal can cause picture distortion. This is not a TV problem.



Issues	Solutions and Explanations
PC Connection	
A “ Mode not supported message is shown.” message appears.	<ul style="list-style-type: none">Set your PC’s output resolution so it matches the resolutions supported by the TV.
“PC” is always shown on the source list, even if a PC is not connected.	<ul style="list-style-type: none">This is normal “PC” is always shown on the source list, regardless of whether a PC is connected.
The video is OK but there is no audio.	<ul style="list-style-type: none">If you are using an HDMI connection, check the audio output setting on your PC.



Issues	Solutions and Explanations
Others	
Purple/green rolling horizontal bars and buzzing noise from the TV speakers with Component cable connection.	<ul style="list-style-type: none"> Remove the left and right audio connections from the set-top-box. If the buzzing stops, this indicates that the set-top-box has a grounding issue. Replace the Component video cables with an HDMI connection.
The picture won't display in full screen.	<ul style="list-style-type: none"> HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. Black bars on the Top & Bottom will be shown on movies that have aspect ratios different from your TV. Adjust the picture size options on your external device or TV to full screen.
Image Retention (Burn In) Issue.	<ul style="list-style-type: none"> To minimize the possibility of screen burn, this unit is equipped with Pixel Shift screen burn reduction technology. Pixel Shift lets you set the picture so it moves slightly up and down (Vertical Line) and side to side (Horizontal Dot). The regular, slight movement of the picture reduces screen burn in.



Issues	Solutions and Explanations
A “ Mode not supported ” message is shown.” message appears.	<ul style="list-style-type: none">Check the supported resolution of the TV, and adjust the external device’s output resolution accordingly. Refer to the resolution settings in the user manual.
Caption on TV menu is greyed out.	<ul style="list-style-type: none">You cannot select the Caption menu if you have selected a source connected to the TV via HDMI or Component.The external device’s Caption function must also be activated.
There is a plastic smell from the TV.	<ul style="list-style-type: none">This smell is normal and will dissipate over time.



Issues	Solutions and Explanations
The TV is tilted to the side.	<ul style="list-style-type: none">Remove the base stand from the TV and reassemble it.
The channel menu is greyed out (unavailable).	<ul style="list-style-type: none">The Channel menu is only available when the TV source is selected.
Your settings are lost after 30 minutes or every time the TV is turned off.	<ul style="list-style-type: none">If the TV is in the Store Demo mode, it will reset audio and picture settings every 30 minutes. Change the settings from Store Demo mode to Home Use mode in the Plug & Play procedure. Press the SOURCE button to select TV mode, and go to MENU → System → Plug & Play → ENTER .



Issues	Solutions and Explanations
You have intermittent loss of audio or video.	<ul style="list-style-type: none"> Check the cable connections and reconnect them. Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to a wall, we recommend using cables with 90 degree connectors.
You see small particles when you look closely at the edge of the frame of the TV.	<ul style="list-style-type: none"> This is part of the product's design and is not a defect.
The PIP menu is not available.	<ul style="list-style-type: none"> PIP functionality is only available when you are using a HDMI, PC or Component source.
POP (TV's internal banner ad) appears on the screen.	<ul style="list-style-type: none"> Select Home Use under Plug & Play mode. For details, refer to Plug & Play Feature.



□ Anti-theft Kensington Lock

A Kensington Lock is a device you can use to physically fix your TV in place when using it in a public place. You wrap the Kensington Lock's cable around a large, immobile object and then attach the lock to the Kensington slot on the back of the TV.

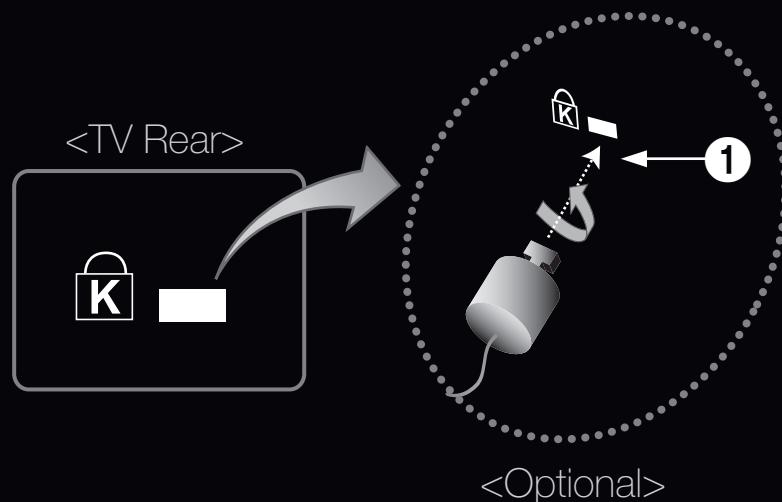
The appearance and locking method may differ from the illustration below depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use. The Kensington Lock is not supplied by Samsung.

☞ Please find a “☒” icon on the rear of the TV. The Kensington slot is beside the “☒” icon.

To lock the product, follow these steps:

1. Wrap the Kensington Lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington Lock cable.
3. Insert the locking device into the Kensington slot on the product **①**.
4. Lock the lock.

-  These are general instructions. For exact instructions, see the User manual supplied with the locking device.
-  The locking device has to be purchased separately.
-  The location of the Kensington slot may be different depending on the TV model.



- The displayed image may differ depending on the model.



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